SIEMENS

Data sheet 6ES7214-1HF40-0XB0



SIMATIC S7-1200F, CPU 1214 FC, compact CPU, DC/DC/relay, onboard I/O: 14 DI 24 V DC; 10 DO relay 2 A; 2 AI 0-10 V DC, power supply: DC 20.4-28.8 V DC, program/data memory 200 KB

General information	
Product type designation	CPU 1214FC DC/DC/Relay
Firmware version	V4.6
Engineering with	
Programming package	STEP 7 V18 or higher
Supply voltage	
Rated value (DC)	
• 24 V DC	Yes
permissible range, lower limit (DC)	20.4 V
permissible range, upper limit (DC)	28.8 V
Load voltage L+	
Rated value (DC)	24 V
 permissible range, lower limit (DC) 	20.4 V
 permissible range, upper limit (DC) 	28.8 V
Input current	
Current consumption (rated value)	500 mA; CPU only
Current consumption, max.	1 500 mA; CPU with all expansion modules
Inrush current, max.	12 A; at 28.8 V
l²t	0.8 A ² ·s
Output current	
for backplane bus (5 V DC), max.	1 600 mA; Max. 5 V DC for SM and CM
Encoder supply	
24 V encoder supply	
• 24 V	L+ minus 4 V DC min.
Power loss	
Power loss, typ.	12 W
Memory	
Work memory	
• integrated	200 kbyte
Load memory	
integrated	4 Mbyte
Plug-in (SIMATIC Memory Card), max.	with SIMATIC memory card
Backup	
• present	Yes
• maintenance-free	Yes
 without battery 	Yes
CPU processing times	
for bit operations, typ.	0.08 μs; / instruction
for word operations, typ.	1.7 μs; / instruction
for floating point arithmetic, typ.	2.3 µs; / instruction

CPU-blocks	
Number of blocks (total)	DBs, FCs, FBs, counters and timers. The maximum number of addressable blocks ranges from 1 to 65535. There is no restriction, the entire working memory can be used
OB	
Number, max.	Limited only by RAM for code
Data areas and their retentivity	
Retentive data area (incl. timers, counters, flags), max.	14 kbyte
Flag	
• Size, max.	8 kbyte; Size of bit memory address area
Local data	
• per priority class, max.	16 kbyte; Priority class 1 (program cycle): 16 KB, priority class 2 to 26: 6 KB
Address area	
Process image	
Inputs, adjustable	1 kbyte
Outputs, adjustable	1 kbyte
Hardware configuration	
Number of modules per system, max.	3 comm. modules, 1 signal board, 8 signal modules
Time of day	
Clock	
Hardware clock (real-time)	Yes
Backup time	480 h; Typical
Deviation per day, max.	±60 s/month at 25 °C
Digital inputs	
Number of digital inputs	14; Integrated
of which inputs usable for technological functions	6; HSC (High Speed Counting)
Source/sink input	Yes
Number of simultaneously controllable inputs	
all mounting positions	
— up to 40 °C, max.	14
Input voltage	
Rated value (DC)	24 V
• for signal "0"	5 V DC at 1 mA
• for signal "1"	15 V DC at 2.5 mA
Input delay (for rated value of input voltage)	
for standard inputs	
— parameterizable	0.2 ms, 0.4 ms, 0.8 ms, 1.6 ms, 3.2 ms, 6.4 ms and 12.8 ms, selectable in
	groups of four
— at "0" to "1", min.	0.2 ms
— at "0" to "1", max.	12.8 ms
for interrupt inputs	
— parameterizable	Yes
for technological functions	
— parameterizable	Single phase: 3 @ 100 kHz & 3 @ 30 kHz, differential: 3 @ 80 kHz & 3 @ 30 kHz
Cable length	W IZ
• shielded, max.	500 m; 50 m for technological functions
• unshielded, max.	300 m; for technological functions: No
Digital outputs	555 . H, for Confining four full office in
Number of digital outputs	10; Relays
Switching capacity of the outputs	io, iwayo
with resistive load, max.	2 A
on lamp load, max.	30 W with DC, 200 W with AC
Output delay with resistive load	OUT WILL DO, 200 TT WILL AU
• "0" to "1", max.	10 ms; max.
- O to 1, max.	10 ms; max.
• "1" to "0" max	To mo, max.
• "1" to "0", max.	
Relay outputs	10
Relay outputs • Number of relay outputs	10 mechanically 10 million, at rated load voltage 100 000
Relay outputs	10 mechanically 10 million, at rated load voltage 100 000

unshielded, max.	150 m
Analog inputs	
Number of analog inputs	2
Input ranges	
• Voltage	Yes
Input ranges (rated values), voltages	
• 0 to +10 V	Yes
— Input resistance (0 to 10 V)	≥100k ohms
Cable length	_100K 61III0
shielded, max.	100 m; twisted and shielded
Analog outputs	
Number of analog outputs	0
Analog value generation for the inputs	
Integration and conversion time/resolution per channel	
Resolution with overrange (bit including sign), max.	10 bit
Integration time, parameterizable	Yes
Conversion time (per channel)	625 µs
Encoder	
Connectable encoders	
2-wire sensor	Yes
1. Interface	
	PROFINET
Interface type Isolated	Yes
automatic detection of transmission rate	Yes
Autonegotiation	Yes
Autorossing	Yes
Interface types	165
RJ 45 (Ethernet)	Yes
Number of ports	1
• integrated switch	No
Protocols	
PROFINET IO Controller	Yes
PROFINET IO Device	Yes
SIMATIC communication	Yes
Open IE communication	Yes; Optionally also encrypted
Web server	Yes
Media redundancy	No
PROFINET IO Controller	
Transmission rate, max.	100 Mbit/s
Services	TOO Mishes
— PG/OP communication	Yes; encryption with TLS V1.3 pre-selected
Isochronous mode	No
— IRT	No
— PROFlenergy	No
Prioritized startup	Yes
Number of IO devices with prioritized startup, max.	16
Number of connectable IO Devices, max.	16
Number of connectable IO Devices, max. Number of connectable IO Devices for RT, max.	16
— of which in line, max.	16
Activation/deactivation of IO Devices	Yes
Number of IO Devices that can be simultaneously	8
activated/deactivated, max.	
— Updating time	The minimum value of the update time also depends on the communication
	component set for PROFINET IO, on the number of IO devices and the quantity of configured user data.
PROFINET IO Device	or coringuica ascritata.
Services	
301 Y1003	
— PG/OP communication	Yes: encryption with TLS V1.3 pre-selected
— PG/OP communication	Yes; encryption with TLS V1.3 pre-selected
— Isochronous mode	No

— Shared device	Yes
— Shared device — Number of IO Controllers with shared device, max.	2
Protocols	
Supports protocol for PROFINET IO	Yes
PROFIsafe	Yes
PROFIBUS	Yes; CM 1243-5 (master) or CM 1242-5 (slave) required
OPC UA	Yes; OPC UA Server
AS-Interface	Yes; CM 1243-2 required
Protocols (Ethernet)	res, OW 1240-2 required
• TCP/IP	Yes
• DHCP	No
• SNMP	Yes
• DCP	Yes
• LLDP	Yes
Open IE communication	
• TCP/IP	Yes
— Data length, max.	8 kbyte
• ISO-on-TCP (RFC1006)	Yes
— Data length, max.	8 kbyte
• UDP	Yes
— Data length, max.	1 472 byte
Web server	,
• supported	Yes
User-defined websites	Yes
OPC UA	
Runtime license required	Yes; "Basic" license required
OPC UA Server	Yes; data access (read, write, subscribe), method call, runtime license required
— Application authentication	Available security policies: None, Basic128Rsa15, Basic256Rsa15, Basic256Sha256
 User authentication 	"anonymous" or by user name & password
 Number of sessions, max. 	10
 Number of subscriptions per session, max. 	5
— Sampling interval, min.	100 ms
— Publishing interval, min.	200 ms
Number of server methods, max.	20
 Number of monitored items, recommended max. 	1 000
 Number of server interfaces, max. 	2
 Number of nodes for user-defined server interfaces, 	2 000
max.	
Further protocols	
MODBUS	Yes
communication functions / header	
S7 communication	
• supported	Yes
• as server	Yes
• as client	Yes
User data per job, max.	See online help (S7 communication, user data size)
Number of connections	
• overall	PG Connections: 4 reserved / 4 max; HMI Connections: 12 reserved / 18 max; S7 Connections: 8 reserved / 14 max; Open User Connections: 8 reserved / 14 max; Web Connections: 2 reserved / 30 max; OPC UA Connections: 0 reserved / 10 max; Total Connections: 34 reserved / 64 max
Test commissioning functions	
Status/control	
Status/control variable	Yes
 Variables 	inputs/outputs, bit memories, DBs, peripheral I/Os (without fail-safe), times,
	counters
Forcing	Variable and broad and a short of the state
• Forcing	Yes; peripheral inputs/outputs (without fail-safe)
Diagnostic buffer	V
• present	Yes
Traces	

 Number of configurable Traces 	2
Memory size per trace, max.	512 kbyte
Interrupts/diagnostics/status information	
Diagnostics indication LED	
RUN/STOP LED	Yes
• ERROR LED	Yes
MAINT LED	Yes
Integrated Functions	
Frequency measurement	Yes
controlled positioning	Yes
Number of position-controlled positioning axes, max.	8
Number of positioning axes via pulse-direction interface	Up to 4 with SB 1222
PID controller	Yes
Number of alarm inputs	4
Potential separation	
Potential separation digital inputs	FOOM AO for A rejector
Potential separation digital inputs hetugen the changels, in groups of	500V AC for 1 minute
between the channels, in groups of Petential congration digital outputs	1
Potential separation digital outputs • Potential separation digital outputs	Relaye
between the channels	Relays No
between the channels, in groups of	2
EMC	
Interference immunity against discharge of static electricity	
Interference immunity against discharge of static	Yes
electricity acc. to IEC 61000-4-2	
 Test voltage at air discharge 	8 kV
Test voltage at contact discharge	6 kV
Interference immunity to cable-borne interference	
 Interference immunity on supply lines acc. to IEC 61000- 4-4 	Yes
 Interference immunity on signal cables acc. to IEC 61000- 4-4 	Yes
Interference immunity against voltage surge	
 Interference immunity on supply lines acc. to IEC 61000- 4-5 	Yes
Interference immunity against conducted variable disturbance indu	
Interference immunity against high-frequency radiation acc. to IEC 61000-4-6	Yes
Emission of radio interference acc. to EN 55 011	Voc. Croup 1
Limit class A, for use in industrial areas Limit class B, for use in recidential areas	Yes; Group 1
Limit class B, for use in residential areas	Yes; When appropriate measures are used to ensure compliance with the limits for Class B according to EN 55011
Degree and class of protection	
IP degree of protection	IP20
Standards, approvals, certificates	
CE mark	Yes
UL approval	Yes
cULus	Yes
FM approval	Yes
RCM (formerly C-TICK)	Yes
KC approval	Yes
Marine approval	Yes
Highest safety class achievable in safety mode	
 Performance level according to ISO 13849-1 	PLe
• SIL acc. to IEC 61508	SIL 3
Ambient conditions	
Free fall	
• Fall height, max.	0.3 m; five times, in product package
Ambient temperature during operation	0.00
• min.	0 °C
• max.	55 °C; Number of simultaneously activated inputs or outputs 4 or 3 (no adjacent

points) at 60 °C horizontal or 50 °C vertical, 8 or 6 at 55 °C horizontal or 45 ° vertical • horizontal installation, min. • horizontal installation, max. 55 °C • vertical installation, min. • vertical installation, min. • vertical installation, max. 45 °C Ambient temperature during storage/transportation • min. • max. An °C Ambient temperature during storage/transportation • min. • max. All pressure acc. to IEC 60068-2-13 • Operation, min. • Operation, min. • Operation, min. • Operation, min. • Storage/transport, min. • Storage/transport, min. • Storage/transport, max. 1 080 hPa All thus during operation relating to sea level • Installation altitude, min. • Installation altitude, min. • Operation, max. 5 000 m; Restrictions for installation altitudes > 2 000 m, see manual Relative humidity • Operation, max. Vibrations • Vibration resistance during operation acc. to IEC 60068-2-6 • Operation, tested according to IEC 60068-2-6 Shock testing • tested according to IEC 60068-2-27 Yes: IEC 68, Part 2-27 half-sine: strength of the shock 15 g (peak value), duration 11 ms Pollutant concentrations • SO2 at RH < 60% without condensation SO2: < 0.5 ppm; H2S: < 0.1 ppm; RH < 60% condensation-free configuration / header Programming language — LAD — FBD — FBD — SCL Know-how protection • User program protection/password protection • User program protection/password protection • User program protection yes • Copy protection • Protection level: Winter protection • Protection level: Mead-vinter protection • Protection level: Mead-vinter protection • Protection level: Read-vinter protection		
• horizontal installation, max. • vertical installation, max. • vertical installation, max. • vertical installation, max. • vertical installation, max. • min. • min. • max. All °C Ambient temperature during storage/transportation • min. • max. All °C Air pressure acc. to IEC 60068-2-13 • Operation, min. • Operation, min. • Operation, max. • Storage/transport, min. • Storage/transport, min. • Storage/transport, min. • Storage/transport, max. Altitude during operation relating to sea level • Installation altitude, min. • Installation altitude, min. • Installation altitude, min. • Installation altitude, max. Relative humidity • Operation, tested according to IEC 60068-2-6 • Operation, tested according to IEC 60068-2-6 • Operation, tested according to IEC 60068-2-6 • Operation, tested according to IEC 60068-2-7 Vibrations • Vibrations • Vibrations • So2 at RH < 60% without condensation Pollutant concentrations • SO2 at RH < 60% without condensation SO2: < 0.5 ppm; H2S: < 0.1 ppm; RH < 60% condensation-free configuration / header configuration / header configuration / programming / header Programming language — LAD — FBD — SCL — Yes Know-how protection • User program protection/password protection • User program protection/password protection • User program protection/password protection • protection of confidential configuration data • Protection level: Write protection • protection of confidential configuration data • Protection level: Write protection • protection of confidential configuration data • Protection level: Write protection • protection of confidential configuration data • Protection level: Write protection • protection of confidential configuration data • Protection level: Write protection • Feb. • Protection level: Write protection • Protection level: Write protection		points) at 60 °C horizontal or 50 °C vertical, 8 or 6 at 55 °C horizontal or 45 °C vertical
vertical installation, min. vertical installation, max. Ambient temperature during storage/transportation min. max. 70 °C Air pressure acc. to IEC 60068-2-13 Operation, min. Operation, min. Operation, max. Storage/transport, min. Storage/transport, min. Storage/transport, max. 1 080 hPa Allittude during operation relating to sea level Installation altitude, min. Installation altitude, max. Sood m; Restrictions for installation altitudes > 2 000 m, see manual Relative humidity Operation, max. Vibrations Vibrations Vibration resistance during operation acc. to IEC 60068-2-6 2-6 Operation, tested according to IEC 60068-2-6 Shock testing tested according to IEC 60068-2-7 Ves: IEC 68, Part 2-27 half-sine: strength of the shock 15 g (peak value), duration 11 ms Pollutant concentrations SO2 at RH < 60% without condensation SO2: < 0.5 ppm; H2S: < 0.1 ppm; RH < 60% condensation-free configuration / header configuration / header Programming language — LAD — FBD — SCL Yes Know-how protection • User program protection/password protection • User program protection/password protection • User program protection/password protection • Protection for of infential configuration data • Protection of confidential configuration data • Protection of confidential configuration data • Protection level: Write protection • protection of confidential configuration data • Protection level: Write protection • protection of confidential configuration data • Protection level: Write protection • protection of confidential configuration data • Protection level: Write protection	 horizontal installation, min. 	0 °C
vertical installation, max. 45 °C Ambient temperature during storage/transportation imin. 40 °C imax. 70 °C Air pressure acc. to IEC 60088-2-13 Operation, min. 795 hPa Operation, max. 1080 hPa Storage/transport, max. 1080 hPa Storage/transport, max. 1080 hPa Allitude during operation relating to sea level Installation altitude, min1 000 m Installation altitude, max. 5000 m; Restrictions for installation altitudes > 2 000 m, see manual Relative humidity Operation, max. 95 %; no condensation Vibration resistance during operation acc. to IEC 60088-28 Operation, tested according to IEC 60068-26 Operation, tested according to IEC 60068-27 Ves; IEC 68, Part 2-27 half-sine: strength of the shock 15 g (peak value), duration 11 ms Pollutant concentrations SO2 at RH < 60% without condensation Pollutant concentrations SO2 at RH < 60% without condensation SO2 at RH < 60% without condensation SO2 in Riasing language -LAD Yes; incl. fallsafe -FBD Yes; incl. fallsafe -FBD Yes; incl. fallsafe -SCL Yes Know-how protection User programming / header Programming language -SCL Yes Roos-how protection User program protection/password protection Yes Access protection Protection level: Write protection	 horizontal installation, max. 	55 °C
Ambient temperature during storage/transportation • min.	vertical installation, min.	0 °C
Ambient temperature during storage/transportation • min. • max. 70 °C Air pressure acc. to IEC 60068-2-13 • Operation, min. • Operation, max. • Storage/transport, min. • Storage/transport, min. • Storage/transport, min. • Storage/transport, min. • I 1 080 hPa • Installation altitude, min. • Installation altitude, min. • Installation altitude, mix. Soloage/transport, max. 5 000 m; Restrictions for installation altitudes > 2 000 m, see manual Relative humidity • Operation, max. Vibrations • Vibration resistance during operation acc. to IEC 60068-2-6 2-6 • Operation, tested according to IEC 60068-2-6 Shock testing • tested according to IEC 60068-2-7 Yes; IEC 68, Part 2-27 half-sine: strength of the shock 15 g (peak value), duration 11 ms Pollutant concentrations • SO2 at RH = 60% without condensation SO2 at RH = 60% without condensation Frogramming language - LAD - FBD - SCL - FBD	vertical installation, max.	45 °C
min.		
Nax. Air pressure acc. to IEC 60068-2-13 Operation, min. Operation, max. Storage/transport, min. Storage/transport, max. All titude during operation relating to sea level Installation altitude, min. Installation altitude, min. Installation altitude, max. Relative humidity Operation, max. Vibrations Vibration resistance during operation acc. to IEC 60068-2-6 Operation, tested according to IEC 60068-2-6 Shock testing tested according to IEC 60068-2-27 Shock testing So2 at RH < 60% without condensation SO2 at RH < 60% without condensation SO2 at RH < 60% without condensation SO2 at RH < 60% without programming / header Programming language LAD FBD Yes; incl. failsafe FBD Yes; incl. failsafe SCL Know-how protection Sucception S		-40 °C
Air pressure acc. to IEC 60068-2-13 • Operation, min. • Operation, max. • Otorage/transport, min. • Storage/transport, min. • Storage/transport, min. • Storage/transport, min. • Storage/transport, min. • Installation altitude, max. Relative humidity • Operation, max. Vibrations • Vibration resistance during operation acc. to IEC 60068-2-6 • Operation, tested according to IEC 60068-2-6 • Operation, tested according to IEC 60068-2-6 • Ves Shock testing • Iested according to IEC 60068-2-27 Yes; IEC 68, Part 2-27 half-sine: strength of the shock 15 g (peak value), duration 11 ms Pollutant concentrations • SO2 at RH < 60% without condensation S02: < 0.5 ppm; H2S: < 0.1 ppm; RH < 60% condensation-free configuration / header configuration / programming / header Programming language —LAD —FBD —SCL Yes; incl. failsafe —SCL Yes Know-how protection • User program protection/password protection • User program protection/password protection • Sopy protection • Sopy protection • Sopy protection • Protection for onfidential configuration data • Protection fevel: Write protection • Protection level: Write protection		
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Storage/transport, max. Altitude during operation relating to sea level Installation altitude, min. Installation altitude, max. So00 m; Restrictions for installation altitudes > 2 000 m, see manual Relative humidity Operation, max. So00 m; Restrictions for installation altitudes > 2 000 m, see manual Relative humidity Operation, max. So00 m; Restrictions for installation altitudes > 2 000 m, see manual Relative humidity Operation, max. So00 m; Restrictions for installation altitudes > 2 000 m, see manual Relative humidity Operation, max. So00 m; Restrictions for installation altitudes > 2 000 m, see manual Relative humidity Operation, max. So00 m; Restrictions for installation altitudes > 2 000 m, see manual Relative humidity Operation of peration of confidential configuration acc. to IEC 60068-2 (or max.) Yes IEC 68, Part 2-27 half-sine: strength of the shock 15 g (peak value), duration 11 ms Pollutant concentrations Os02: < 0.5 ppm; H2S: < 0.1 ppm; RH < 60% condensation-free configuration / programming / header Programming language - LAD - FBD - SCL Yes Know-how protection User program protection/password protection Socon protection Operation of confidential configuration data Pres	•	
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Installation altitude, max. Relative humidity Operation, max. Vibrations Vibration resistance during operation acc. to IEC 60068-2-6 Operation, tested according to IEC 60068-2-6 Yes Shock testing Iterated according to IEC 60068-2-7 Pollutant concentrations SO2 at RH < 60% without condensation SO2: < 0.5 ppm; H2S: < 0.1 ppm; RH < 60% condensation-free configuration / programming / header Programming language — LAD — FBD — SCL Know-how protection Output protection / Pess Flock to the substance of the s		1 000 m
Relative humidity Operation, max. Operation, max. Vibrations Vibration resistance during operation acc. to IEC 60068-2-6 Operation, tested according to IEC 60068-2-6 Yes Shock testing Itested according to IEC 60068-2-7 Yes; IEC 68, Part 2-27 half-sine: strength of the shock 15 g (peak value), duration 11 ms Pollutant concentrations SO2 at RH < 60% without condensation SO2: < 0.5 ppm; H2S: < 0.1 ppm; RH < 60% condensation-free configuration / programming / header Programming language - LAD - FBD - SCL Yes; incl. failsafe Yes; incl. failsafe Yes; incl. failsafe Yes; incl. failsafe Yes; block protection User program protection/password protection Source for the shock 15 g (peak value), duration 11 ms Pollutant concentrations Yes Source for the shock 15 g (peak value), duration 11 ms Pollutant concentrations Source for the shock 15 g (peak value), duration 11 ms Pollutant concentrations Source for the shock 15 g (peak value), duration 11 ms Pollutant concentrations Source for the shock 15 g (peak value), duration 11 ms Pollutant concentrations Source for the shock 15 g (peak value), duration 11 ms Pollutant concentrations Source for the shock 15 g (peak value), duration 11 ms Pollutant concentrations Source for the shock 15 g (peak value), duration 11 ms Pollutant concentrations Source for the shock 15 g (peak value), duration 11 ms Pollutant concentrations Source for the shock 15 g (peak value), duration 11 ms Pollutant concentrations Source for the shock 15 g (peak value), duration 12 ms Pollutant concentrations Source for the shock 15 g (peak value), duration 12 ms Pollutant concentrations Source for the shock 15 g (peak value), duration 12 ms Pollutant concentrations Source for the shock 15 g (peak value), duration 12 ms Pollutant concentrations Source for the shock 15 g (peak value), duration 12 ms Pollutant concentrations Source for the shock 15 g (peak value), duration 12 ms Pollutant concentrations Source for the shock 15 g (peak value), duration 12 ms Pollutant concentrations So	,	
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Vibrations	•	OF 0/1 no condensation
Vibration resistance during operation acc. to IEC 60068- 2-6 Operation, tested according to IEC 60068-2-6 Yes Shock testing • tested according to IEC 60068-2-27 Pollutant concentrations • SO2 at RH < 60% without condensation S02: < 0.5 ppm; H2S: < 0.1 ppm; RH < 60% condensation-free configuration / programming / header Programming language — LAD — FBD — SCL Know-how protection • User program protection/password protection • User program protection/password protection • Block protection • Block protection • protection of confidential configuration data • protection level: Write protection • protection level: Write protection • Protection level: Write protection Yes Yes Yes Yes Yes Yes Yes Ye		95 %; no condensation
2-6		0 ((0)
Shock testing • tested according to IEC 60068-2-27 Yes; IEC 68, Part 2-27 half-sine: strength of the shock 15 g (peak value), duration 11 ms Pollutant concentrations • SO2 at RH < 60% without condensation S02: < 0.5 ppm; H2S: < 0.1 ppm; RH < 60% condensation-free configuration / header configuration / programming / header Programming language — LAD — Yes; incl. failsafe — FBD — Yes; incl. failsafe — SCL Know-how protection • User program protection/password protection • User program protection/password protection • Block protection • Block protection • protection of confidential configuration data • Protection level: Write protection Yes		2 g (m/s²) wall mounting, 1 g (m/s²) DIN rail
tested according to IEC 60068-2-27 Yes; IEC 68, Part 2-27 half-sine: strength of the shock 15 g (peak value), duration 11 ms Pollutant concentrations SO2 at RH < 60% without condensation SO2: < 0.5 ppm; H2S: < 0.1 ppm; RH < 60% condensation-free configuration / header configuration / programming / header Programming language LAD	 Operation, tested according to IEC 60068-2-6 	Yes
Pollutant concentrations SO2 at RH < 60% without condensation S02: < 0.5 ppm; H2S: < 0.1 ppm; RH < 60% condensation-free configuration / header configuration / programming / header Programming language — LAD — Yes; incl. failsafe — FBD — Yes; incl. failsafe — SCL Know-how protection User program protection/password protection Copy protection Pes Block protection Protection of confidential configuration data Protection level: Write protection Yes Protection level: Write protection Yes	Shock testing	
SO2: < 0.5 ppm; H2S: < 0.1 ppm; RH < 60% condensation-free configuration / header configuration / programming / header Programming language — LAD — FBD — Yes; incl. failsafe — SCL Know-how protection • User program protection/password protection • Copy protection • Block protection Access protection • protection of confidential configuration data • Protection level: Write protection Yes Protection level: Write protection Yes Yes	• tested according to IEC 60068-2-27	
configuration / header Programming language — LAD Yes; incl. failsafe — FBD Yes; incl. failsafe — SCL Yes Know-how protection • User program protection/password protection • Copy protection • Block protection • Block protection • protection of confidential configuration data • Protection level: Write protection Yes Yes	Pollutant concentrations	
configuration / programming / header Programming language — LAD Yes; incl. failsafe — FBD Yes; incl. failsafe — SCL Yes Know-how protection • User program protection/password protection Yes • Copy protection Yes Block protection Yes Access protection • protection of confidential configuration data • Protection level: Write protection Yes	 SO2 at RH < 60% without condensation 	S02: < 0.5 ppm; H2S: < 0.1 ppm; RH < 60% condensation-free
Programming language — LAD — FBD — Yes; incl. failsafe — SCL Yes Know-how protection • User program protection/password protection • Copy protection • Block protection • Block protection • protection • protection of confidential configuration data • Protection level: Write protection Yes • Protection level: Write protection Yes	configuration / header	
- LAD Yes; incl. failsafe - FBD Yes; incl. failsafe - SCL Yes Know-how protection • User program protection/password protection Yes • Copy protection Yes • Block protection Yes Access protection • protection of confidential configuration data • Protection level: Write protection Yes	configuration / programming / header	
- FBD Yes; incl. failsafe - SCL Yes Know-how protection ● User program protection/password protection Yes ● Copy protection Yes ● Block protection Yes Access protection ● protection of confidential configuration data Yes ● Protection level: Write protection Yes	Programming language	
— SCL Yes Know-how protection	— LAD	Yes; incl. failsafe
Know-how protection • User program protection/password protection • Copy protection • Block protection • protection • protection of confidential configuration data • Protection level: Write protection Yes • Protection level: Write protection Yes	— FBD	Yes; incl. failsafe
 User program protection/password protection Copy protection Block protection Access protection protection of confidential configuration data Protection level: Write protection Yes 	— SCL	Yes
 Copy protection Block protection Yes Access protection protection of confidential configuration data Protection level: Write protection Yes 	Know-how protection	
● Block protection Yes Access protection ● protection of confidential configuration data Yes ● Protection level: Write protection Yes	User program protection/password protection	Yes
● Block protection Yes Access protection ● protection of confidential configuration data Yes ● Protection level: Write protection Yes		Yes
Access protection • protection of confidential configuration data • Protection level: Write protection Yes Yes		
 protection of confidential configuration data Protection level: Write protection Yes 	· ·	
Protection level: Write protection Yes	·	Yes
·	-	
	·	
Protection level: Complete protection Yes	·	
programming / cycle time monitoring / header		
• adjustable Yes		Yes
Dimensions		
Width 110 mm		110 mm
Depth 75 mm	րգիլյ	ro IIIIII
	Woights	
	Weights Weight, approx.	435 g

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